1: Bowen-Jones et al. K-5 (1955-1958) 1961
EZ6 Malta EZ6

D. SEABORNE AND AIRBORNE TRAFFIC 1958[3]. 505 509

	Total - Calling - British				Passengers (No.)			Freight (Tons)	
	Number	Tonnage	Number	Tonnage	In	Out	Transit	In	Out
Steam Vessels	1,792	2,008,803	458	1,346,925)	9,852	10,745	35,175	580,636	54,927
Sailing Vessels	267	22,836	15	122)					
Aircraft	3,283	91,661	3,118	87,897	30,232	31,501	28,848	588	238

E. AGRICULTURE[4] 241 433

		Acreage	Yield-tons
(i)	Total Area cultivated	44,235	
(ii)	Wheat	5,000	3,000
	Barley and Mixta	4,083	2,158
	Forages (inc. sulla, vetches & Ferrana)	11,824	3,855
	Broad Beans	1,250	500
(iii)	Potatoes - Spring crop	4,763* (1957-6,000)	15,420
	- Winter crop	3,228	7,360
	Melons	1,837	1,939
	Onions	1,263	3,389
	Tomatoes	1,912	8,588
	Other vegetables	5,000	16,198
(iv)	Grapes	5,000	6,000**
	Citrus	160	500**
	Other fruit	1,000	6,000**
(v)	Cotton	3 (1956-187)	1
	Cumin Seed	8 (1952-518)	2

* Note. Abnormally low.
** Note. Acreage and yield of treecrops in particular should be treated as indicating only orders of magnitude.

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(vi)	Livestock (Enumeration)	
	Horses, Donkeys and Mules	6,575
	Goats	36,944 (1950-50,159)
	Sheep	15,011 (1950-20,148)
	Imported Store bulls	3,081
	Milk cows	4,178 (1950- 2,861)
	Other cattle	2,466
	Swine	16,362
(vii)	Number of holdings	12,192
	Number of mechanized implements - 2 wheeled	700
	- 3 & 4 wheeled	54
	- tracked	25
	- milking machines	7
	- threshers	22

423 407

1: Bowen-Jones et al. K-5 (1955-1958) 1961
EZ6 Malta EZ6

[P.317]

Chapter X

THE PRACTICE OF FARMING

We have considered at some length the physical and social environments in which Maltese farming exists, the distribution of crops and of agricultural regions, and examined some of the physical and legal characteristics of the land holdings in which the land is worked. There follows a more systematic statement and a tentative interpretation of farming practice, and studies of the Maltese countryfolk (Plate XVIII). 128

A. Livestock

Livestock in Malta, with the exception of the wandering, wasteland-feeding, herds of sheep and goats, is rarely seen or heard. Cattle, pigs, poultry and rabbits are all kept in stockyards or enclosures, and horses, mules and donkeys, when not working in the fields, are stabled the whole time. Their near invisibility has caused us to omit mention of them in earlier sections. As noted in Chapter VII, the Maltese farmer, faced with land shortage as a result of the high population density, has chosen to cultivate stall-fed fodders as short-rotation crops rather than to grow pastures or perennial forages. It is difficult to believe that he has not made the correct choice if the criterion adopted is that of intensive and continual use of difficult land resources and the minimising of waste. 231 [246] 231

Numerically, goats are by far the most important (Plate XVII). During the past century, they increased tenfold in number, a fact which marks the amazingly rapid increase in milk consumption, but in the last decade the trend has been reversed. The indigenous breeds, highly regarded in the Mediterranean up to the close of the eighteenth century, have now almost entirely been replaced by crosses with introduced British Saanen types. These crosses, in which Saanen blood remains dominant to the third or fourth generation, are hardy and prolific milkers, considering the quality of feed. Goats have remained important not only because they still supply about 40 per cent. of returned milk sales (and a large amount produced domestically and sold illegally), but also because, together with sheep, they utilise the great extent of wasteland as natural pasture. Some feeding on field grown forages is practised - during the survey such feeding was observed at Marnisi on broad beans and at Wied Babu on sulla, for example - but this is rare. 234 311 [232] [246]

Land unusable for cultivation, and which makes up over 30 per cent. of the total area, provides the basic forage ration. Breeders and kids are given supplementary feeds of beans and hay crops. Although, therefore, goats are theoretically poor converters of fodder into milk, they cannot be displaced by milch cows without at once offending the tastes of most Maltese for goats' milk and cheese, and making the uncultivable land almost totally unproductive. Sheep, somewhat less numerous than pigs, and by far less valuable, occupy the same ecological niche as do goats. Used domestically in many areas for milking, and by far the cheapest meat animals, these predominantly hairy rather than woolled sheep, of a strong German strain, are one of the 'crops' of the barren lands. In the absence of statistics of fodder consumption, the only evidence available is that obtained in interview. It would certainly seem that sheep and goats use much uncultivated land in their demand for feed, and are almost the only media for obtaining any yield at all from one-third of the land of Malta and Gozo. (See also Chapter X C.)

Pigs, numerically the most important meat animals, are almost all of recently introduced breeds, the English Large White in particular, Berkshire, Wessex Saddleback and Middle White have been tried, but the Large White Yorkshire, even when bred for lean meat to an average weight of 180 lb., has 231 232

[See page 256 -- Analyst]

231 proved its superior adaptability. An interesting point is that, before 1914, Serbia
232 and Croatia exported to Malta large numbers of pigs for fattening, while Yugo-
[139] slavia is today importing Large Whites as breeders from this country. It is now illegal to use other than pedigree boars for breeding, and the success of the Agricultural Department and the relative enthusiasm of the Maltese farmer in raising pig production standards have made Malta self-sufficient in this respect at least. Local grain and imported beans form the basis of feeding stuffs given by the best farmers. Animal slaughterings now average about 30,000 head per annum.

23 Of the total cattle population of some 6,000 in Malta and 3,000 in Gozo, nearly 30 per cent. are milch cows. This proportion has increased steadily since the first introduction of milch cows in the early years of British occupation. Before 1800, the indigenous Maltese breed, raised as general purpose stock in normal [197] peasant tradition, alone was of importance. During the nineteenth century, specialised breeds were slowly introduced, a process which culminated in trials with Swiss Brown, Polish and Jersey cattle during the 1920's and '30's. By 1939, the cattle were mainly of mixed blood with the older strains predominating, and those still found are rapidly being displaced because of their low milk yields of some 1 to 1½ gallons a day. The only surviving registered Maltese bull is to be seen on a farm at Bingemma Gap. In the post-war period, imported Ayrshires, British Friesians and Durham Shorthorns have proved very successful and popular. The Friesian strains in particular are very effective for crossing, important in that most country herds are still of mixed blood. A typical composition was noted in a stockyard on Delimara Peninsula - 13 milk cows and three heifers consisting of pure polled Maltese, Friesians, Friesian/Maltese crosses, Ayrshire/Maltese crosses, together with seven Friesian and crossed Friesian [139] calves. Store cattle, of which over 3,000 are annually imported for fattening, are of various breeds, and come in the main from within the Mediterranean region.

231 This cattle population, which supplies half of the total production of milk in
234 Malta, and approximately two-thirds in Gozo, as well as over 75 per cent. of the beef consumed, is a very special element in Maltese agriculture. The imported store cattle have but to be fattened for slaughtering. Trustworthy statistics are lacking, but it would seem that over one-half of the imported fodder is consumed for this purpose.

The milch cows are given a maintenance ration of sulla and other leguminous fodders, and a production ration of imported beans, grains and cake. Carob beans and chopped prickly pear are sometimes used, and *oxalis cernua* may also be fed in moderation.

231 This large demand for fodders has so far been met by maintaining at high
234 level the production of leguminous and grain crops. Only in recent years has it
246 become economic to add high protein feeds. For social and health reasons the human consumption of high protein foods, milk in particular, has been encouraged. It has therefore often been suggested that further concentration on production of forage crops is necessary.

It is probable that such a policy would be both uneconomic and impracticable. In the first place, as long as it requires an average of 6 lb. weight of fodder protein to produce 1 lb. weight of animal food protein, then any country with restricted land resources has to look twice at the wastage involved. Such a country, having to import either animal products or vegetable products, or even both as in the case of Malta, has little to gain by specialising in a production technique in which over three-quarters of the crops grown and imported for feed merely go to maintaining livestock in existence. Thirdly, since that land now grazed by sheep and goats is virtually unusable in any other way, they cannot be simply replaced by cattle. More cattle would mean less arable farming of food crops and this would entail either the loss of potential vegetable exports from irrigated land or, more feasibly, the improvement of arable dry-farmed crops, e.g. sorghums in place of barley.

The impracticability of a policy designed vastly to increase forage production may be proved as follows. The growing of perennial fodder crops is out of the

1: Bowen-Jones et al. K-5 (1955-1958) 1961
EZ6 Malta EZ6

question unless a complete agricultural revolution committed Maltese farming 231
to thorough-going dairy farming specialisation. Such specialisation, given the 234
climatic and physiological difficulties, would not be easy to justify. A very considerable seasonal glut of milk exists between May and August at present, and 246
the Milk Marketing Undertaking cannot handle the flush. This degree of fluctuation could be lessened but not removed. Costs of production are such that not only would exports be uneconomic but imported tinned milk can and could considerably undercut home production. Local consumption of fresh cows' milk could not be expanded much more than 10 to 15 per cent. above the present level which is already the highest in the Mediterranean, as long as tinned milk is more easily preserved, and as long as the rural community keeps goats and sheep. The banning of milk imports and of the production of goat milk would hardly be in the consumer's economic or dietetic interests.

Horses, mules and donkeys, some 6,500 in number, are still very important 492
as work animals. For farm transport, they can only be replaced by the internal 407
combustion engine purchasable only by the more prosperous cultivators. Produce collection by merchants' lorries is increasing as also is the use of hired tractors for cultivation. The numbers of these animals is unlikely to decrease quickly outside the urban areas because of their usefulness in tilling difficult land.

Of the remaining small livestock, rabbits and poultry already make a very 231
large although immeasurable contribution to food supplies. Improvements in 235
quality could be obtained if farmers' interest was aroused. At present, mixed breeds of poor poultry are commercially uneconomic.

In conclusion, we must return to the vexed question of dairy-farming and 234
milk production in Malta. In 1950, the Director of Agriculture (1) put the 654
question: 'Under prevailing conditions in Malta and Gozo, which is the more profitable animal to keep? The cow or the goat?', and followed with the statement: '. . . no accurate answer backed by accurate scientific data has ever been given'. The same impasse had often been noted before, for example by Dawson Shepherd (2), and Stockdale (3). An unpublished report on Maltese Agriculture by a visiting F.A.O. commission (4) similarly found itself at sea in the absence of any firm information. In 1956, the complexity as well as the obscurity of the situation was manifested in a Report on the Dairy Industry by G. W. Ford (5). In this study, reference is made to the different conclusions reached by independent observers, and to intermediate suggestions made by Marshall (6), one of whose remarks: 'I simply cannot visualise hygienic milk production by the peasant farmer in Malta', our observations would endorse.

Milk-production in Malta is no longer a matter of economics but, as in many countries, is affected by social and dietetic policies. Brief mention was made in Chapter VI C of the problem of the incidence of undulant fever and its association with milk infected by *Brucellosis Melitensis*. Some 20 per cent. of Maltese goats are thus infected, and any dietetic campaign to encourage the drinking of milk, particularly important in child welfare, must take account of this. Few cows are thus far infected and elimination is easier. The problem that emerges is therefore both economic and social in character. It is felt by some that reliance on imported tinned milk is one solution but by others such a suggestion is regarded as humiliating. Another possible line of action is to replace goats with milch cows, and in 1956 a system by which herdsmen were offered one Dutch Friesian heifer in calf for 12 diseased goats actually came into operation. The third possibility is to accept the position as it exists at the moment, or slightly to modify it, and centralise milk distribution thus enabling pasteurisation. This too has been done. Even now however, the cost of tinned milk imports, the cost of producing cows' milk, the surplus of goats' milk, all these as well as the land use point mentioned earlier, still remain to be dealt with. As we shall see, the market for milk called into being as a social measure is now the mainstay of many farmers of all grades. The development of the centralised agency, the Milk Marketing Undertaking has been accompanied by a guaranteed price system. Some 50 per cent. of all milk producers have, as a result of this organising of wholesale purchases, formed their own union the K.M.H. - '*Kumpanija Maltija*

was that gross financial loss totalled £124,000 representing an equivalent subsidy to consumers of M.M.U. products, while, if profits on imports were subtracted the figure would rise to over £200,000. The commercial aspect of milk marketing is thus completely artificial and dominated by welfare policies. Price policy, even so, has not been powerful enough to even out the immense seasonal fluctuation in production of goats' milk, roughly half the total, and the smaller but still considerable fluctuation of cows' milk.

Meat production is rather more crude. The Government abattoir slaughters all the horned cattle, most of the swine and a considerable proportion of sheep and goats. The commercial transaction between producer and butcher is usually direct. Here once more the small scale and the unspecialised nature of meat production controls all else. The 1956 Census of Agriculture recorded only nine specialist cattle breeders and 94 breeders of swine as compared with over 700 engaged in sheep and goat breeding (in roughly equal numbers). Licensed importers bring in the store cattle which are then usually sold to non-specialist farmers. Feeding standards are as low as with milch cows. There is little incentive to improvement because of the low standard set by the widespread practice of milk producers selling old and diseased stock for butchering. Pig meat and store-bull meat do command a premium but, while some 15,320 horned cattle were slaughtered in 1957-58, the average import rate of stores is only some 3,000. In the same year, 5,000 sheep (of the indigenous poor breeds) and 8,400 goats (mainly those useless for milk production) as well as 7,800 lambs and kids, were slaughtered. The commercial side of meat and, for that matter, hides and skin production, like that of milk, can only be improved as and when the arable sector of agriculture is further developed.

Lastly, we must refer to exports. For some years, the most important exported agricultural product has been the spring crop of potatoes. Some general points concerning the production and sale of potatoes have already been made (Chapter VII, pp. 205-206), but one or two points need expansion here. The main market for pseudo-early potatoes grown in the Mediterranean (harvested in April and May), lies in North-West Europe. During the earlier part of this century, Holland, Belgium and Germany were the most important buyers but, of recent years, the Arran Banner variety, which yields well as a pseudo-early in Malta, has only found favour in Glasgow. By 1955 this dependence on a single main market was appearing dangerous and since that time, as noted by Haesler in 1957 (8), more heed has been taken of consumer demand for other earlier varieties, yellow rather than white fleshed, such as the Eigenheimer. On the marketing side, some important problems remain. The virtual absence of good civilian port facilities and the dependence on lighterage puts up freight costs and discourages shippers. The middlemen and wholesale handling of produce for export is not above reproach while the only worthwhile markets expect good and consistent quality of graded merchandise. Here the deficiencies of even the most commercially sophisticated part of the community can partly negate improved efforts on the part of the producer. Standards set by the home market tend to affect the services rendered to foreign markets and before the latter can be expanded, the former will have to be improved. There is one sector in which a separate break-through has begun. Air freightage of high value for bulk merchandise (which does not include potatoes) can make distant markets accessible to medium-scale individual producers. Thus flowers, plants and seeds are to some small extent being traded by a few growers sufficiently skilled to bypass the mercantile system. This cannot be done by all but it might encourage emulation.

The whole of the marketing organisation is of course organically associated with production and the commercial aspects of production need consideration.

One of the first points that strikes an observer in the Islands is that the production of the different commodities is altogether too concentrated in time. In the case of milk, a traditional organic cycle imposed by crude goat husbandry imposes great financial strains on the centralised agencies. With crops it would seem that traditional fear of risk-taking, rational enough in a peasant economy but antithetical to the whole nature of commercialism, is now hampering

1: Bowen-Jones et al. K-5 (1955-1958) 1961
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E. The Farmers of Malta

From survey work, farm interviews and detailed case-studies we have been able to distinguish certain characteristic types of Maltese farmer. The variety of practice and productivity within the pseudo-peasantry makes it impossible to take general treatment any further, therefore in this section are presented a cross-section of such types. For obvious reasons, we cannot present details which might lead to the identification of any farmer or his landholding. 241

1. THE PART-TIME FARMER

Numerically as important as full-time farmers this group, although heterogeneous, indicates the incompleteness of the recent 'flight from the land'. At the highest level, as in case-study (A), the stability given by a non-agricultural income encourages good land use.

A - A holding of c. 10 *tmien* in two blocks of 19 irrigable field plots in Region AII, Mellieha Isthmus, produces c. 60 per cent. of the cultivator's net income. Irrigated market gardening produces potatoes, tomatoes, artichokes, cucurbits, carrots, cauliflowers, garlic, lemons and table-grapes for sale, and beans, maize, celery and turnips for home consumption. Rents of reclaimed land on Government property are negligible. The farmer maintains that he holds the land partly to support the present family of three and to enable his eight adult emigrant sons to have some 'hobby' land when they return as expected to Malta. Nevertheless, his husbandry standards and commercial acumen are good, his yields high. This type of part-time farmer is neither common nor rare.

B - At the other extreme is a policeman who, in 1950, purchased 14 *tmien* of dry land in Region XVIIIb, ta'Qali, in order to have land to work after retirement. Of this, 10 *tmien* is let out on annual leases, both tenants' and landlord's responsibilities being ignored, and 6 *tmien* is 'cultivated' by the owner, carrying weed infested and diseased crops of wheat, sulla and broad beans. This is symptomatic of unhealthy economic and social conditions, viz. simple land hunger based on insecurity of urban occupations and inadequate pensions.

2. THE FULL-TIME ARABLE FARMER ON IRRIGATED LAND

The time-consuming nature of market gardening and the high value of irrigated *saqwi* land tend either to restrict the total size of holdings or to focus the farmer's attention on such land.

C - In Region XIV, two full-time farmer brothers with three dependants cultivate 7 *tmien* in one irrigated plot (Fig. 111A). One of the brothers returned from temporary migration to Canada in 1913 bringing some capital and ideas. Their equipment consists of hoes, an American windpump and an English diesel pump. There is a well graded irrigation system of three cisterns, overhead and ground level stone channelling. The diesel pump is used for filling the cisterns, the windpump for maintaining the water level. Both farmers share equally the cost of equipment and pumping and have a family arrangement for division of labour and produce. Surplus produce is sold in the Rabat market.

D - A full-time farmer with family of 11, six of whom are adults, working on holding of c. 30 *tmien* in Region A XV a The Blue Clay Basin (Fig. 141). Lives on a main plot of 14 *tmien* on Blue Clay and marl. On the main part of the holding are cultivated irrigated fruit and vegetable crops. The other plots consist mainly of rock, rough grazing and carobs with some vines. Intensive aboriculture is practised with peaches replacing plums and old apple stock being replaced by vines and peaches.
Livestock - 1 horse, 9 sheep, 13 pigs and 3 goats.
Equipment - *mohriet* and hoes. The farmer borrows a 'rotavator' for summer cultivation and has 'access' to lorry and jeep for marketing produce. The dwelling has piped water supply. Irrigation water is obtained from [231] [407] [312]

2: Boissevain E-5 (1960-1961) 1965
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giant dockyard in Cospicua, or for one of the various British Service departments scattered over the island. Gozo is more dependent upon agriculture, but many Gozitan men work in Malta, returning to their families for the weekend. Though Maltese villages are populated mostly by industrial workers, they have nonetheless a decidedly rural atmosphere about them, for their inhabitants still have links with the agricultural economy of the past. Many retain a patch or two of land which they plant with potatoes or some other cash crop to supplement their wages, and virtually all keep chickens and rabbits to supply them with eggs and fresh meat for special celebrations.

TABLE 1. Occupational Classes in Farrug and Kortin[1]
(Expressed as percentages of the total male working population)

Occupational Class	*Farrug*	*Kortin*	*Islands*
Professional and Clerical	4	7	15
Service and Skilled	39	52	55
Semi- and Unskilled	42	27	20
Agricultural	15	14	10
Totals	100	100	100

A hundred years ago, the inhabitants of Farrug were mostly farmers, though many were also employed on a cottage-industry basis in the thriving cotton industry of the time. Today they are for the most part wage labourers. Of the total male working population, 42 per cent are employed as semi-skilled and unskilled labourers, 39 per cent work as skilled fitters and as service personnel (shopkeepers, drivers, policemen, etc.) and 15 per cent as farmers. Only 4 per cent are professionals and white-collar workers. Three-fourths travel outside the village to their places of employment, chiefly with the Malta Government and the British military departments.

The occupational structure of Kortin is much the same. The higher proportion of skilled and clerical workers is in part a reflection of its past importance as an administrative centre, for until early in this century it was the seat of the district court. Seven per cent of the men work in professional and white-collar

[1] The figures for Farrug and Kortin are based on surveys I conducted, and the national figures on the *1957 Census: Report on Economic Activities*, pp. 45–55. The totals of the male working population in Farrug, Kortin and the Maltese Islands are 296, 1,131 and 75,930 respectively.

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

The stay of the French in the island was too short to have any effect on the population. A social barrier has been built up between the British and the people of the land, and the general impression gained is that, though there are a certain number of mixed marriages, there cannot, even after three generations of a large, if floating, British element in Valletta, be more than a very thin British strain in the population.

We have shown, in dealing with the history of the island, how extremely difficult it is to account for the wholesale immigration of an Armenoid-like population at any period. We have also shown how, in spite of the continual immigration of people of the Mediterranean stock, the Maltese type (*i.e.* Malta second race, displaying Armenoid characters) appears to have persisted for a long period. It would seem, therefore, a point worthy of further consideration, whether the development of the Maltese along the lines they appear to have followed may not be due to certain definite geographical factors of whose influence we are as yet unaware. It is possible that if we had at our disposal a long unbroken series, instead of larger or smaller series from Neolithic, Mediæval, and modern ossuaries, we should not find such striking contrasts as we do at present. Anthropological data from various parts of the Mediterranean show that there is very often a significant difference between two villages in different valleys of the same mountain range. It is possible that even the few generations which have elapsed between the building of Hal Tarxien and 1921 may be the equivalent, in time, of such a journey in space, and certain big changes may have taken place owing to changing geographical conditions. There can be little doubt that the climate of Malta has changed very much, not only since the first terrace was cut in the Weid Dalam, but even since the formation of the second terrace. We have also suggested that the evidence from Professor Zammit's excavations at Hal Tarxien hints at a change in climate since Neolithic times. The change in the structure of the population may be due, therefore, partly to geographical as well as to historical causes.

Whether or no the development of the Maltese sub-race is due to particular geographical conditions, there can be little doubt that, in Malta at least, the strain is biologically remarkably successful and extremely fertile. In spite of the high infant mortality which has existed in the past, they have continued to increase, and the modern developments of hygiene and the care of infants are likely to make the increase still more rapid. If the overcrowding continues, in a comparatively short time we shall be faced with conditions in the island which would appear to be, biologically speaking, unsatisfactory. Sanitary conditions can be improved, food can be imported, but excessive overcrowding may bring its own remedy, either in disease or in a diminished fertility. The present fertility is quite possibly due to some underlying climatic condition. In spite of lack of water, Malta has long been extremely fertile botanically, and was famed for this in classical times. The Maltese goats, by far the most abundant large mammal of the island apart from

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

man, are also unusually fertile, and the females possess remarkably developed udders. Possibly similar causes make both man and the goats fertile. If this is so, emigrants from the island will probably, after a short time, lose their fertility,[1] whilst the only limiting factors on the island itself will be space and the food and water supply.

Summarizing our general conclusions, the race in Malta which is associated with the period of great megalithic buildings—a cultural stage we have termed "Malta Local Neolithic"—appears to be closely akin to the Mediterranean race. This is our "Malta first race." At a later date, possibly towards the end of the Bronze Age, but more probably during the Early Iron Age, Malta was peopled by a race with different characteristics, our "Malta second race." These people are of Armenoid type, but probably have an admixture of Mediterranean blood. Their origin appears to be the Eastern Mediterranean. They may have come to Malta either directly or by way of Carthage. They may have destroyed the previous inhabitants, or they may merely have pursued methods of peaceful penetration. This race has firmly established itself in Malta, and all subsequent introduction of foreign blood has failed to raise the variation. During the course of years certain changes have taken place; there are also certain local variations, but the differences between Malta and Gozo are not greater than the differences between the general population of Malta and at least one, and possibly more, of the more isolated villages.

APPENDIX I.

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[1] Of interest in this connection is the fact that there is at present a Maltese colony in Detroit, U.S.A., and it will be instructive to observe whether, amid alien surroundings, the strain is able to perpetuate itself and to retain its fertility.

159 311 The trend is clear from an analysis of the utilisation of his land holdings:-

	1956			1957			1958		
	T	S	K[49]	T	S	K	T	S	K
House and adjacent roadway		2	0		2	0		2	0
Vines		3	0		3	0		3	0
Prickly Pear		3	0		3	0		3	0
Potatoes	2	0	0	2	0	0	2	0	0
Vegetables, other than potato(a)	6	4	0	4	3	0		4	0
Fodder(b)	8	2	3	10	3	3	14	2	3
Rough grazing - and shooting			0	12	0	0	24	0	0
Unused		1	0		1	0		1	0
	18	3	3	30	3	3	42	3	3

(a) mainly tomatoes and melons (bittieh and dulieh)
(b) silla, wheat (qamh), barley (xghir), mixed wheat and barley (mahlut), beans.

*159 422 ●231 Livestock Pawlu's farm holding of slightly less than twelve acres is large by Gozitan standards. So also is the herd which it supports. Late in 1957 he had some 40 goats and 8 kids, two cows, a sheep, one horse, and about 100 poultry. "Goats are easier to handle than are cows" (Pawlu). For him, as for most herdsmen in the Islands, the dairy cow is still something of a novelty, and an expensive one, requiring considerable capital outlay for both the animal and its accommodation. The single sheep is quite typical, being kept mainly for the popular 'rikotta' cheese made from its milk. The large poultry element is also becoming a common feature in Gozo, though disease takes a very high toll. Pawlu's one horse provides the motive power for the cart which for him as for the rest of Gozo is still the prime mover of goods and produce.

*159 234 434 Pawlu's income derives mainly from the sale of milk to the M.M.U. This was also the case before 1958 when Gozo finally became a 'closed' area in which unpasteurized milk could not, legally, be sold. Thus the herdsman's cry of "Halib, halib" ('Milk, milk') as he took his goats from door to door and milked them to order on the customer's threshold is heard no more. The churned milk from the farms is collected and taken to the factory at Xewkija - before 1958 it had had to make the long journey to the Hamrun centre. Apart from the unpasteurised fresh milk used by the family, Pawlu sells, and sold, the milk his goats produce to the M.M.U. He pays no labour, hired or family, and does not consider his own time as a cost factor. Some idea of his income is therefore obtainable from an account of his receipts from the M.M.U. against the costs of the fodder.

423 234 *159 The amount of fodder bought in to supplement home production varies. In the case of sulla (silla), particularly, Pawlu is forced to buy in a large quantity when his own crop is poor. His purchases of wheat (qamh) and

*159 cafes, clubs, etc., it remains the centre of village affairs
512 and the focus of activity, secular as well as religious.
794 Pawlu is one of the farmers of this village, but his
592 children are not likely to be farmers. Therefore can they
178 remain of the village? As yet it has patently little to
*159 offer their education and culture and no apparent opportunity for a livelihood at their new and higher standards. They are leaving farming and are leaving the village as well in search of the means of earning a living - other than in farming.

SUMMARY of CASE I

*159 (A large scale Gozitan goats' milk producer with a consider-
423 able land holding.)
427 A. Land.
[311] - Area held in 1956: 18⅝ tmien, 1957: 30½ tmien, 1958: 42½ tmien, the additions being almost entirely in the form of grazing land. The present holding is in 26 plots, rented from several landlords including Church, Civil Government and private individuals. Owns one small plot and sublets several others from neighbouring farmers. Plots scattered over considerable area in Gharb and St. Lawrens districts. Rent totals £23.14.0 p.a., ranging from 21/6 per tomna for cultivable (dry) land to 4/- per tomna for rough grazing.

- Previously held a further 20 tmien, 3 of which have been sub-let or exchanged and 17 abandoned owing to inaccessibility.

*159 B. Utilisation.

	1956	1957	1958
423 House	¼	¼	¼
Vines	¼	¼	¼
311 Prickly pear	¼	¼	¼
Fodders	8½	10½	14½
Vegetables	8⅝	6½	2⅝
Rough Grazing	-	12	24
Unused	⅛	⅛	⅛
Total	18⅝	30½	42½ tmien

*159 C. Livestock. (Nov. 1957)
● 231 38 goats, 8 kids
2 cows
1 sheep
100 poultry
1 horse

*159 D. Capital.
401 - Land all rented save one small plot.
[427] - Appears to be amassing capital from profits on milk
[456] production.
- No specialised equipment.

*159 E. Labour.
464 - No permanent hired help.
- One son works full time on the farm, help from other children.

*159 F. Production and Sales.
433 - Milk is the main item of income to which occasional
[434] small sales of vegetables are the only addition.
- Sample daily feed for 1 cow yielding c.3 gallons

*159 443 fluctuation. In such a situation he would find fixed annual repayments on loans for development much more difficult to meet.

SUMMARY OF CASE II

*159 (A goats milk producer with subsidiary cash-cropping).

A. Land.

[423] [427] Rents 10 separate plots, all dry land, in the Qawra Region.
Several landlords; total rent including house (£8.10.0) £35 p.a.

B. Utilisation.

[241] [311]
- Attention devoted mainly to fodders: wheat, barley, sulla.
- Grapes, some tomatoes and a few potatoes for sale.
- Various vegetables for home consumption.
- Grazing on waste and abandoned land.

[231] C. Livestock.
- About 25 goats: 2 rams and 23 milkers all over 2 yrs. old.
- 20 hens, 5 pigs, 1 mule.

D. Capital.

[423] [454] [412] [409] [426] [427]
(i) No freehold land.
(ii) Little or no liquid reserve.
(iii) Equipment: usual hand implements; no mechanical equipment until 1957 when he bought a rotary cultivator at £350 with a government loan to be repaid at £62 p.a.
- Hires tractor and plow at 15 to 25/- per tomna.
- Borrows spray from brother.

E. Labour. (v. Table 4: Analysis of Work Record, 1957-58)

[464]
- No permanent hired labour.
- Help from wife and children (8 children, all below 14 yrs. of age, 4 at school).
- Employs a vine-grafter at 25/- a day when necessary (150 vines can be grafted in one day).
- Pays friends and relatives £1 daily for help at grape harvest.

F. Production and Sales.

[234] [43] [231]
(i) 22 goats (Nov. 1957) yield 3 gallons of milk daily which sells at 16/9 (5/7 per gall.).
- Keeps only milkers as no accommodation for rearing.
- Female kids sold for breeding fetch 7/- each, male kids sold to butchers when 15 days old fetch same price.
- Buys 3 to 5 goats annually to maintain herd - price in 1957 £10 each.
- 5 pigs includes 3 for meat, 2 for breeding; piglets weaned after 40 days and sold a week later.

[245] [434] [244] (ii) Vine shoots bought from Govt. Farm at 28/- per 100. Grapes sold to vintners. Price takes no account of quality.
- In 1957 sold 30 qantar at 44/- per qantar = £66.
- Tomatoes, small quantities sold, but bulk of crop made into paste for home use.

G. Husbandry.

[245] (i)
- Much effort expended on vines. Pruned in January, when 2 yr. old shorts cut back.
- Grafting in February; new grafts produce small crop the same year.
- Sprayed, plowed (3 or 4 times) in May.

*159
[245] - Many stocks now 20 years old require replacement.
- No early potatoes grown "because of sea-spray".
- Sulla sufficient for his own stock.

[233] (ii) - Half of every working day is devoted to grazing
[461] the goats on waste and abandoned land.
- Fodder from his own sulla and barley but has to buy cake and beans, prices varying between £2 and £3 per qantar - expensive.

[241] (iii) - Manure from his own stock provides all his requirements and leaves surplus for sale.
- Uses 6 bags of sulphate of ammonia p.a., the only chemical fertiliser.

[231] - Pig feed costs 11/- per sack which lasts his 5 pigs 4 days.

H. General.

*159
829
241 - Has a hopeful attitude towards farming but still expects a great deal of Government help in the form of grants, loans and subsidies.
- Claims that his children intend to succeed him on the land but they are young enough to change their minds.
- Willing to accept advice, but not impressed by experts who tell him either "things he knows already" or give him advice "which is sound but not applicable to Maltese conditions".
- Has only a very general idea of costs and returns. Takes no account of value of family labour.

*159
[434] - Basic income is from sale of milk (£300 in 1957) and
[234] grapes (£66) plus small quantities of vegetables (c.£12). Spends £100 p.a. on food for family in addition to his own produce.
- Typical of farmer who is satisfied with his lot, keeps his family decently fed and clothed but spends little or nothing on non-essentials. He is anxious to improve his herd, accommodation and methods but his farm provides no financial surplus with which to do this.

[511]
[454]
[241] - Continues to accept a standard of living far below that of his more sophisticated compatriots.

[511]

*159 Shopping is done in the local village but Nadur
-443 makes the journey to Valletta for the 'Puq il-Monti'
484 Sunday market occasionally, though with the intention of
521 gossipping rather than making purchases.

CASE III : Summary

(A goats' milk producer.)

*159 A. Land.
423 30 Tmien in Mxaxar-Gharghur Hills area.
14 Field plots in two main groups:
All on soils of tad-Dawl and l-Iklin Complexes.
Of this - 5½ tmien freehold,
- 24½ tmien leased from 6 landlords.
Rents range between 10/- and £1 per tomna.

*159 B. Utilisation.
241 Almost entirely fodder production e.g. February 195
311 3 plots under widna.
1 plot under barley - pulled green.
3 half plots under wheat.
2 half plots under sulla.
1 plot used for goat grazing - fallow.
1 plot under fofifa (bitter vetch).
1 enclosure under prickly pear.
3 plots under vetches.
[434] Remainder subdivided and carrying potatoes, broad beans and a few vegetables.
Only regular cash crop - winter potatoes.

*159 C. Livestock.
● 23 During 1957/1958 goat numbers ranged from 35 to 50 and milkers from 27 to 40.
5 sheep kept for wool and sheeps milk for cheese-making.
1 mule - imported from Tunis.

*159 D. Capital.
[423] - Land held in freehold valued at £400 in early 50's.
[454] - Freehold village house.
[412] - According to his own statement liquid reserves of £200.
[407] - Equipment - hand tools, local wooden plows, etc.
No machinery but plans to buy rotary cultivator.

*159 E. Labour.
464 - Wife spends c.30% of her time on the land, although childrens ages range from 3-8.
- Communal help for threshing.
- Hires labour for barley and sulla cutting.
During 1957 c.18 man days at cost of c.£15.
[427] - Every 4th year deep plowing (by contract) of about half the fields. Cost £1 to 15/- a tomna.
- Each year has some land tilled by rotary cultivator. Cost 12/- a tomna.

*159 F. Production and Sales.
433 - Goats milk sales range from February minimum of c.45 lbs. per day to May-August maximum of c.70 lbs. per day.
- Winter potatoes as cash crop vary considerably in yield and in selling price.
- Occasional sales of small quantities wheat and wool
- Produce consumed by family valued at c.£1 per week.

*159 G. Husbandry.
241 (i) Land - All dung used on fields - usually before potato setting.
- 7-8 bags of sulphate of ammonia applied annual
- The concentration on leguminous fodders prov[illegible] the employment of the normal four-year rota[illegible]

*159 24 (ii) Seed - Keeps grain and seed-potatoes back from harvest - usually least saleable.
- Buys bulk seed.

*159 231 (iii) Livestock - Breeds goats from own herd and has no wish to try breeding experiments.
Replacement rate c.5 per annum.
- Feeding - no feeding programme and relies mainly on bulk green and dried fodder including rough grazing on wasteland and 6-7 bundles a day of 'haxix' - weedy roadside and wasteland vegetation.

H. General.

*159 159 A conservative Maltese goats milk producer. More suspicious than most and not prepared to give much financial information. He has no idea of costs or profit and is only interested in sustained high milk prices.

CASE IV : Wistin (A large-scale goats' milk producer with some land)

*159 234 474 Like Case III, Wistin is a goat herder with fields supplying fodder for the animals together with some food items for the family. His herd is however much larger and in mid-1957, included ninety animals. He began goat herding with a few goats many years ago but the biggest increases have been in the past few years of guaranteed milk sales to the M.M.U. Now he aims primarily at profit from milk and is very much less concerned with rearing kids. He is a member of the Malta Milk Company (Il-Kumpanija Maltija tal-Halib) which, he believes, stands for the 'rights' of the milk-producing herdsmen. The Company demands improvements in the system including a higher price to the producer in the flush production period. It can scarcely be said to argue from strength, in view of the present market situation heavily distorted in favour of the milk-producer by Government policy.

*159 234 461 656 The village became a "Closed Area" in 1955. This meant that Wistin could no longer sell unpasteurized milk from door to door - previously there had been some seven or eight milk-sellers like him in the village. Since 1955 he has been concentrating on his goats and on fodder production. He says he "likes goats". Certainly milking, cleaning and grazing the animals takes the greater part of every day (as in Case II, Wistin takes out his goats to graze and exercise practically every afternoon of the year). He is proud of his herd and "would feel ashamed to appear at the M.M.U. collection depot without a reasonable amount of milk for sale". In the flush summer season this is 20 gallons or more but drops considerably in the winter. Wistin strives to keep the milk production as steady as possibly however throughout the year because a steady supply of milk to the M.M.U. means a steady income for his family. He himself works on his fields only "when some spare time is

433 434 *159 46 24 465

159 423 - 10 field plots in single block of 4 tmien (Rent £2.10.0.), and
- 7 field plots in single block of 2 tmien (Rent £3).
- Grazing ground on Defence Dept., wasteland.

B. Utilisation.

159 241 311 (i) At any one time about half the land - that of the deep-soil terraces - will be under potatoes with a few vegetables, and the remainder under barley and leguminous fodder.

(ii) The arable land tends to be neglected as a result of pre-occupation with livestock. The land is therefore deteriorating and as soil wash reduces soil-depth and water availability, peas and vetches are replacing less hardy crops. The most accessible fields in this hilly region are worked mainly to meet domestic needs.

159 231 234 C. Livestock.

90 goats including 75 breeders and 2 billies.
7 sheep for meat and cheesemaking.
This herd built up in farmers lifetime (c.50 years).

D. Capital.

159 423 (i) No freehold land.

(ii) A freehold village house joint possession of farmer and brother-in-law.

511 426 (iii) Receives C.A.R.E.[21] food gifts but the family standard of living is by no means poor. No debts except on intra-family loan basis.

E. Labour.

159 464 (i) Of the family of 11, two children are employed elsewhere and the remainder give occasional help with the stock and on the fields.

(ii) The fields are inaccessible to powered tools. Hired labour for fieldwork - c.15-20 man days @ 24/- a day including mule and implements.

F. Production and Sales.

159 43 234 (i) Goats milk sales range from February minimum of c.100 lbs. per day to July maximum of 290 lbs. per day. Annual sales of the order of 6,400 galls. @ average price 5/9d per gallon.
Gross income from milk sales c.£1800.
No accurate record of expenditure on purchased feed but total can be estimated as of the order of £500 p.a.
Net income probably not more than £800 p.a.

(ii) Manure sold to arable farmers during first half of year with net profit of £18.

(iii) Home produced and consumed food and milk valued at c.10/- a day.

G. Husbandry.

159 23 (i) Livestock feeding of traditional pattern sulla, beans and cake is more carefully regulated in relation to yields than in Case III. Considerable emphasis placed on grazing and on stock exercising.

(ii) Herd suffers fairly severely from abortion and the kids from various diseases - 5 out of 16 in 1956, 4 out of 12 in 1957.
No prophylactic or remedial measures except more careful feeding. Sells sick and old stock for slaughtering.

(iii) Tries to extend period of maximum production by prolonging mating period but prefers to rely on "natural" periodicity rather than on producing offseason high yields. Has high standards for yields and has a good record in local shows for billies and breeders.

158 434 H. General.

An example of a high-class village goats-milk producer.

159 241 B. Utilisation.

Most of the 1 tomna of cultivated land is permanently used for potatoes intended for domestic use. There are also a few patches of garlic, beans, onions and other vegetables. A few vines and prickly pear plants give some saleable produce e.g. prickly pear fruit sold from door to door fetched £10 in 1956.

159 231 234 C. Livestock.

November 1956:
45 goats, 7 kids, 2 billies, 1 horse, 24 hens and rabbits.
November 1956 to July 1957:
15 goats died.
July 1957:
50 goats.
September 1957:
48 goats, 11 kids, 1 billy.
November 1957:
25 milking goats, 10 kids.

159 42 D. Capital.

(i) No freehold property and little equipment except for cart.
(ii) In perpetual debt - probably between £60 and £100 behind in outgoings at any one time (v. Table 5).
(iii) Receives C.A.R.E.[27] food gifts.

159 464 E. Labour.

No family labour. Of 10 surviving children, only two are above school-leaving age and they have non-agricultural employment.
- Hires no labour or machinery.

159 434 234 [433] F. Production and Sales.

(v.Table 5)
(i) Goats milk sales range from December minimum of c.20 lbs. per day to May-August maximum of c.70 lbs. per day (1957).
Typical annual pattern of usage in recent years:
2500 gallons sold to M.M.U. (@ average price 5/9 per gall.)
200 gallons sold privately (@ average price c.5/6 per gall.)
200 gallons used domestically.
Gross income from milk sales are of the order of £750 p.a.
Known expenditure on feed of the order of £400 p. .
Net income probably less than £200 p.a.
[432] (ii) Sales of old milch goats and kids fluctuate with condition of herd and with disease. In 1957 10 diseased goats fetched 70/- each and 5 kids c.10/- each. Replacements cost between £8 and £20 for Maltese-Saanen goats in milk.

159 232 234 G. Husbandry.

(i) Livestock Feeding. Typical pattern:
50 goats receive 4 bundles sulla, 25 lbs. beans and 50 lbs. cake in summer. During winter more greens and less beans. Very little grazing.
(ii) Herd suffers badly from pregnancy and after-birth diseases and also from abortion. No prophylactic or remedial measures known to the farmer who, like most of his type, merely tries to sell sick stock for slaughtering and replaces with new.
(iii) No real control of lactations and most of milking goats are mated between September and February. Is reluctant to try summer serving since suffering losses in 1956. Regards yield of 2 lbs. per day as minimal.

H. General.

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433

This farmer is typical of many herdsmen. Without capital or land he derives from previous generations of peripatetic herdsmen who milked their goats on the 'rounds' of urban houses. Now forced to sell his milk to a centralised agency (the N.M.U.) for pasteurisation he is protected from price decline during the summer season of over-production but prevented from obtaining extra profits and perquisites (often of rather a dubious character). Without capital he has to rely on credit terms for fodder purchases and therefore pays merchant prices which are higher than those of other farmers. A garden plot and the stock supplies about half the family's food, without which increment the family economy could not operate. There is no possible future except on a low level for this type of production.

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CASE VI : Gaetu (A milk producer with a considerable land holding.)

In May, 1957, Gaetu had 9 cows and about 50 goats. During the year he sold some thirteen goats for the abattoir and of the eight kids born in the year several died "because they didn't want to go on living". In November of the same year three of his cows had to be killed, two of them on account of 'paralysis of the feet' (probably related to lack of exercise and perpetual stall-feeding). The goats get scarcely more grazing than the cows, being limited to the small yards adjoining the main farm building (v. Map 8).

The compulsory slaughter of the three ailing cows (for which he will be entitled to import replacements) has profoundly shaken Gaetu's faith in cows in general. He maintains that he "will put his efforts into goats for the loss of a goat means a loss of £10 against the £200 in the case of a cow."

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234
[311]
[246]
435
[464]
[451]
[651]

Together with his adult son, Gaetu works 23 tmien of land, including some which is irrigable; and the emphasis in cropping is heavily on fodder production. But they still have to buy in a considerable amount of food. For example in the 1956-57 winter Gaetu spent £175 on sulla, £99 for straw, and £15 on winter potatoes which were in glut. He feeds his animals according to yield which appears to mean that he gives more food and attention to the better yielding animals. "There is no profit in providing expensive fodder for poor-yielding animals." In fact, however, Gaetu has very little appreciation of his profit. None of his labour or that of his son is counted as a cost and he keeps no detailed account of income and expenditure. He gets receipts from the N.M.U. but otherwise, being illiterate himself, feels "reluctant to ask anyone for a written statement". Nevertheless he reckons to be able to put together some sort of balance sheet for the income-tax authorities each year.

*159 C. Livestock.

- 50 goats
- 231 - 2 cows, 3 calves, expecting to add 3 imported Friesians at c.£140 each.
- 234 - Chickens: buys unsexed chickens at 30-40/- for 50 in the hope of gaining egg producers. (Sexed females would cost 112/- for 50).

*159 D. Capital.

- 42 The farmhouse and buildings are owned, though the exercise yards are rented (v. Map 8).
- 454 - Seems to have a small capital reserve but is unwilling to spend this on equipment, which he prefers to buy with the aid of a govt. loan.
- Some £1200 amassed during the war has now been largely spent, in part on the house but mainly on purchase of stock.
- [409] - No mechanical equipment apart from a motor-pump bought for £68 in 1948.
- Tractor plows hired at £1 per tomna when necessary.

E. Labour.

*159
464
- No permanent hired labour, but two youths employed at 10/- each per day, all found, for c.3 months of the year, and occasional hire of neighbours' sons.
- Full time workers: the farmer and his married son: no female labour is employed.
- The farmer is the only one of 7 brothers who have remained in farming.

*159 F. Production and Sales.

- 43 Goats' milk to M.M.U. varies between 5 and 10 galls. daily, plus c.7 galls. cows milk. Probable income from these sources well over £1000 p.a.
- Against this must be set considerable expenditure on fodder, records of which are not kept. Sulla may cost up to £300 p.a. Straw may cost up to £125 p.a. Beans and cake at £3.10.0 and £2.18.6 per qantar respectively.
- Secondary small sources of income include "private sales" of milk, sales of vegetables and manure.

These incomplete accounts suggest a modest profit, but this has not prevented disappearance of war accumulated capital reserves. (See D: Capital).

G. Husbandry.

*159
231
234
- Feeds according to yield. Large scale purchases of fodder necessary, despite quite careful attention to holding.
- Feeds vegetables (including potatoes) when these are cheap owing to glut; when this is done, bean ration is reduced.
- Rations are doubled for cows in calf.
- Cows are exercised in yard but never grazed.
- Goats grazed on waste and fodder fields.

H. General.

*159
433
- When asked whether he considered himself to be herdsman or farmer, replied that he might be regarded as a "general dealer" in crops and animals.
- In fact his enterprise is overwhelmingly directed towards production of milk and is yet another dependent on the guaranteed milk price.
- Fields are definitely secondary, though well-tended and are primarily for the provision of fodder.
- This farmer appears to make a modest profit from his enterprise, but has no appreciation of the costs involved.

6: Beeley · K-5 (1957-1958) 1959 EZ6 Malta EZ6

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MAP: 8
FARMSTEAD
CASE VI

[Following p. 102]

1 MAIN ENTRANCE ROOM
2 LIVING-ROOM/BEDROOM
3 WELL
4 WATER (TAP)
5 POULTRY
6 RABBITS
7 STEPS TO CELLAR USED FOR SHEEP
8 CARTS
9 GENERAL YARD

OTHER BUILDINGS

1 0 1 2 3 4 5 6 7 8 9 10
YARDS

159 For once a single man can be convinced of the success of a
829 novel method or crop he will soon be copied by his fellows.
178 Wenzu himself observes that when he had heard about the
246 lucerne for the first time and had planted some with great success in his own fields neighbouring farmers were not slow to copy him (v. Section 4).

CASE VII : Summary.

159 (A goats' and cows' milk producer with a small land holding.)

423 A. Land.

427 - Has 3 tmien, worked by another farmer who shares income (£21) with him.
- Holds on lease a further area which had been let out for building and brings him £32 p.a. - much more than could be obtained for its crops.
- Also rents grazing in summer months.

159 B. Utilisation.

23 - The 3 tmien field is under sulla, barley and a few
24 vegetables.

C. Livestock.

159 - Is changing over from goats to cattle.
23 - Goats: 1954: 60; 1957: 44; 1958: 38.
234 - Cattle: 4 Friesians. Aims to build up the herd by private import of Ayrshires of which he has a high opinion. 3 of the cattle are owned by his sons though he tends them.

159 D. Capital.

454 - No information, but appears to have some reserves.

E. Labour.

464 - Some assistance from a son who is in govt. employment.
- Hires no labour.
- Thus does great bulk of the work himself.

F. Production and Sales.

434 - Milk (Oct. 1957) 10 gallons goats' milk, 9 gallons
234 cows' milk daily to M.M.U. Gives sons a share in income though they appear to make no payment to their father for fodder, stall accommodation etc.
- Calves and kids usually sold after weaning.

G. Husbandry.

159 (1) Grazing. Where possible, goats grazed out and this is
23 said to save him 15/- a day and to reduce sulla con-
427 sumption to 4 bundles daily.
311 - Rents 7 tmien of govt. land from part-timers at £1 per month from Jan. to Aug.
- This land is good, cultivable land untended because of part-timers' inability to work it.

(2) Fodder.
- Cake, barley, potatoes, beans, sulla.
- Feeds all that the animals will take.
- Buys in bulk when prices low.
- In six months (Oct. 1957-Mar. 1958) used nearly ½ tons of cake and 15 tons of beans.
435 - Sulla is bought at 9/- to 16/- per hamel according to
434 quality and uses some 200 hmiel per annum.
- Fodder costs leave very small profit margin from milk.

H. General.

159 - Attempting to profit from sales to M.M.U. with no
156 knowledge of the economics involved.
- Extremely suspicious of agents, government etc.

159 - Has a higher opinion of his ability as a stock farmer than facts warrant.
156 - Aims to build up cattle herd in place of goats since he assumes (with no factual background) that profit will be greater.
[231] - Much influenced by personalities and is willing to accept advice uncritically if the person giving it is, in his opinion, sound.
- Lacks educational background and experience necessary to make a real profit from his herd, but seems content with present living conditions.

CASE VIII : Niklaus (A working partnership of five brothers with diversified production)

159 472 [423] [234] Niklaus is the primus inter pares in a permanent partnership of five brothers. The syndicate farms some 70 acres and, in February, 1957, had a herd of thirty cattle. There is some division of labour among the five, with one being acknowledged the expert on cattle, another "knows most about the fields", and a third the driver and general business manager. Both their father, who died in 1915, and their grandfather were farmers but the brothers have considerably added to the holding.

159 472 234 433 The emphasis of the partnership is now heavily on cows' milk production. They retain only two goats. With about 20 cows in milk they aim to produce some 50 gallons a day - Niklaus observes that the yield from cows can be maintained while that of goats fluctuates markedly with the seasons. Costs of cows' milk production are also steadier, says Niklaus, with fresh greenery in the winter and prickly pear in the summer months as supplements to the standard items of diet. The fodder produced on the brothers' own fields has to be supplemented by purchased feed but judicious use is made of vegetables in glut, especially cauliflowers which could be bought by the farmer at 1s per sack in early 1957.

159 407 454 234 [429] Mechanization on the farm includes the hiring of a mould-board and tractor to deep-plow the land every fourth year (cost - £1 per tomna), and the hiring of a threshing machine. The brothers themselves own two hand cultivators and a small van, complete with the partnership insignia on the door. Currently much capital is being put into building a large, two-storey cows' shed within the village. The brothers aim to centralise their milk herd here and plan to have an adjacent exercise yard and water tank. At present their animals are divided among three widely separated byres, although all of these are easily accessible by road - and the van. [435] One of the existing sheds was built between 1949 and 1952 at a cost of "£3,000". On the costs of the present building Niklaus will divulge nothing. His attitude suggests that the money is coming from saved reserves rather than a loan, for he appears reluctant to borrow money even on low interest terms "because anything might happen to prevent the money being repaid."

159 241 (ii) The intensive summer utilisation of the land for unirrigated summer vegetables is characteristic of this region. Tomatoes and brassicas are dominant. Vetches and beans are grown as catch-crops in small patches. This type of cropping sequence i.e. potatoes, vegetables, cereals, sulla, is typical of well-developed Maltese mixed-farming.

C. Livestock.

159 23 234 (i) c.33 head of cattle including 20-22 milch cows, 1 stud bull, 2 bull calves for fattening.
(ii) 2 goats, 1 mule, 1 pony, 12 hens.
(iii) The cattle-herd has been built up since 1940.

D. Capital.

159 [472] (i) The accepted leader of this partnership enterprise is typical of the more commercially minded and successful Maltese farmers in that he was prepared to discuss anything except financial details. The amount of capital of property and even the details of land-holding of this "kulak" class is known accurately by nobody.

[407] [343] [454] (ii) Equipment includes 1 van, 1 hand tractor, 2 water pumps and two large cattle byres. At local values, farm buildings and mechanised equipment represents over £8,000 investment.

[426] (iii) This partnership prefers to indulge in small-scale family borrowing and lending rather than to use official-and controlled- credit facilities.

[423] (iv) Two village houses and over 3 tmien of land are owned freehold.

E. Labour.

159 464 407 427 (i) Partnership labour force totals 6 full-time farm-workers (5 brothers and 1 adult son).
(ii) A youth employed full-time with cattle.
(iii) All plots are deep-plowed by crawler tractor every fourth year at cost of £1 per tomna.
(iv) On this relatively level land a varying fraction of cereal reaping is done by machine. Machine cutting costs £1 a tomna, hand harvesting £3 a tomna. Hand cutting is less wasteful of straw but these farmers have a rare appreciation of the importance of the time-element in their complex economic and land-use system.

F. Production and Sales.

159 433 (i) The only certain information obtainable is of sales of cows milk. During 1957 minimum daily sales averaged 283 lbs. during May, and the maximum of 350 lbs. during March was almost matched in August and the following January. This constancy of sales based on a firm intention to allow production to vary but slightly from an average of 30 gallons a day from 20 milch cows is rarely found in Malta and is typical only of a few technically advanced and commercially minded farmers.

159 43 (ii) The partnership although possessing a stud bull usually buys cows in milk (preferably Ayrshires), a 'good' yielder costing c.£210. Breeding and raising heifers if regarded as unprofitable.

(iii) The main sales of arable produce consist of summer cauliflowers and tomatoes. In an effort to avoid the usual glut of summer brassicas considerable importance is attached to extending the season of production into autumn and winter. Price variations are considerable e.g. In 1956 cauliflower prices dropped to 1/- a sack while in 1956 they had risen to 20/- a sack.

159 178 234 substantial herd to hand over to their sons who, however, show no inclination to stay in farming.

159 232 829 234 A glance at their herd reveals their interest to be in quantity rather than quality. They admit, moreover, that they lack a good deal of knowledge on management of a herd of this size. A number of their cattle die from diseases and ailments of which Antnin and Ġakbu have little appreciation - official sources revealed that two which died in 1957 had anthrax. Their own inclination is to slaughter an ailing animal for meat before it dies naturally. If a cow dies without replacement from the Government they become very resentful. They also suffer a high death rate among imported calves and again blame 'Government'. "The Government never tells us anything about the rearing of animals" assert the two men somewhat naively since they also maintain that "no-one but the farmers knows farming".

159 234 231 In 1958, twelve of the cattle were Bastard-Inglisi type As the sanitary authorities would not grant a license for a larger herd to occupy the present makeshift accommodation (a patch-work, corrugated iron shed) Antnin and Ġakbu aimed to replace these Bastard-Inglisi with the same number of Friesian stock, though would have preferred to have gone on increasing the number in their herd - and thereby the amount of milk sold to the M.M.U.

159 234 433 246 Antnin insists that "cows yield according to the amount they are fed". When asked for an estimate of the cost of producing a gallon of milk he asks "Who knows?" ("Min jaf?"). The fields held by the two men produce a considerable amount of fodder but much more has to be purchased. During glut conditions they feed very cheap cauliflower and, in the dry months between June and September, give the herd prickly pear at the rate of a lorry-load per day. They are almost unique among cows' milk producers in Malta and Gozo in that they are able to graze their animals on War Department land nearby although they have no guarantee of tenure.

159 434 426 Despite the large holding of land and the recent rapid increase in the size of the herd, the financial position of Antnin and Ġakbu is precarious in the extreme. They are operating in a permanent state of DEBT, and have a fluctuating debit account with the dealer who supplies them with fodder (cf. Case V). This makes them reluctant to take on any new debts at high interest rates. The Government loans at 1% do however appeal to them as means of buying more cattle and still further increasing their milk production. Their debt is such that the two friends can rarely keep female calves but have to sell them to pay hire-purchase instalments on cows.

*159 198 829 [454] Their approach to farming is in fact a set of contradictions. With no capital reserves they are making every effort to expand their herd even though this means continued debt. They are full of "our rights as farmers" and yet "suspicious of the Government and what it says". As with milk, "the Government ought to be responsible for the marketing of field produce". On the other hand Antnin is "against co-operatives in farming", although he has never had any experience of any co-operative or farmers' union. They claim to be building up their farm and herd in order to be able to hand over a substantial business to their sons; but their constant complaint is that "Farming is finished in Malta" ("Il-biedja f'Malta spiċċat"), and the avowed intent of both sons is "to leave farming where we earn nothing". They talk of leaving to "get a job" as if farming itself is something less than a 'job'.

CASE IX : Summary.

*159 423 (A long-established partnership of two unrelated stock farmers now engaged in cows'milk production.)

A. Land.

[429] Approximately 100 tmien of dry land in south-east Malta, the bulk in one compact block but with several outlying plots. The exact limits are uncertain since some land owned or rented by others is worked by the partnership. 25 plots are held from several landlords, Defence Dept. being the most important, and there is access to a good deal of grazing land, generally held at low rents from Defence Depts.

*159 241 B. Utilisation.

	1957	1958
Plot 1	Sulla	Wheat
Plot 2	Potatoes, peas, beans, onions.	Potatoes, cauliflowers
Plot 3	Potatoes, sulla	Wheat
Plot 4	Used as a pig sty	
Plot 5	Wheat	Wheat
Plot 6	Sulla	Sulla
Plot 7	Sulla	Sulla
Plot 8	Some potatoes, cowshed, exercise yard, manure heap and pig sties.	
Plot 9	Fallow	Plowed
Plot 10	Sulla	Wheat
Plot 11	Sulla	Plowed
Plot 12	Beans, barley	Wheat
Plot 13	Wheat	Sulla
Plot 14	Wheat	Sulla
Plot 15	Wheat, sulla	Beans
Plot 16	Wheat	Beans
Plot 17	Potatoes	Wheat, beans
Plot 18	Beans, barley	Potatoes, wheat
Plot 19	Yard and buildings	
Plot 20	Wheat	Barley
Plots 21-25	Wasteland grazing	

*159 231 C. Livestock.

Shifting emphasis in recent years.
- Cattle 1956: 18; 1957: 36.
- Goats "some years ago": 36; 1957: 2.
- Pigs 8.

*159 231 The cattle are very mixed in breed including "Bastard-Inglizi", supposedly pure Friesians and crosses between the two.

*159 D. Capital.

(i) No freehold property.

42[6] (ii) In perpetual debt, no reserves and frequent borrowings, particularly from the Government.

[423]

[454] (iii) Equipment - usual hand tools

- rotary cultivator bought with a Government loan of £550, repayable at £100 p.a. plus 1% interest.

[407]

- small motor van, bought in 1953, for transport of milk.

[312]

- no piped water until Feb. 1958.

E. Labour.

*159 464

- No permanent hired labour.
- One man and his daughter together at 30/- per diem and one youth at 25/- engaged at busy times.
- Family labour: two partners and their two eldest sons work full-time and there is additional help from wives and children.

F. Production and Sales.

*159 434 435

- Income almost entirely from sale of milk to M.M.U. Production varies greatly: June 1957: 50 galls. daily; Dec. 1957: 35; Feb. 1958: 80. Sold at 5/6 to 6/- per gall.
- Male calves sold to butcher at £10; females sometimes sold at £30-£40 to pay debts.
- No accounts kept of feeding costs. These include one truckload of prickly pear (30/-) daily from June to October, beans at 55/- per qantar and cake at 46/- (July 1957). A considerable amount of grazing is carried out e.g. on sulla bought green at £6 per tonna.
- Potato sales insignificant and in 1957, owing to glut, involved a loss.

[433]

- Vegetables produced are all consumed by the families.

G. Husbandry.

*159 231 (i) - The importance attached to grazing of cattle is unusual. (Most Maltese cattle are stall-fed all the year.)

- The emphasis is on numbers of stock rather than on their quality. The turn-over from goats to cattle has been helped by the government exchange scheme and by Govt. loans.

[232]

- Occasional outbreaks of disease unnoticed until too late.

[241] (ii) - Crops are often neglected owing to time involved in animal husbandry.

*159 H. General.

The partnership is attempting to profit from guaranteed 234 milk prices without the knowledge or skill to do so. The 829 herd seems to have been built up beyond the numbers which can be properly tended by the labour available.

There is little knowledge of modern methods and still less of costs and returns. The view is firmly held that "cows yield according to the amount they are fed" and the reply to the question "How much fodder is required to produce a gallon of milk was "Min jaf?" (Who knows?).

The partners are extremely conservative in their attitude to marketing, suspicious of outside interference and hostile towards the idea of co-operatives. Yet they expect

[426] continued Government assistance.

Their general pessimistic attitude is summed up: "Il-bieda f'Malta spiċċat" (Farming in Malta is finished).

Despite guaranteed milk prices on which the whole economy is based, the partnership is permanently in debt.

159 Their failure to profit contrasts with the success of the
824 Gozitan milk producer, Case I.
824 The partnership's main aim is to accumulate cattle with-
234 in the current artificial economy of milk production. There
[433] is no thought or care for what might happen if the subsidy were removed or even reduced.

CASE X : Ġamri (An arable farmer in partnership with a brother and engaged in diversified production.)

*159 Ġamri is an arable farmer, specialising in fruit. He
24 has a couple of goats and sheep, a mule, and is keen to
23 acquire more pigs for fattening. Most of his effort is how-
427 ever centred on the land holding which he and his brother work
472 in partnership. Some fifty-three tmien are rented by the two brothers together while Ġamri himself rents a further ten tmien. About two-thirds of the land (17 plots) is owned by private landlords, one sixth belongs to the Church, one tenth to the Government and the remainder - about an acre - is owned by Ġamri's father.

*159 The working partnership of the two brothers is of many
402 years' standing. The brother's eldest son now works full-
464 time alongside the two men. The brothers say they could not
241 cope with any more land than they are working at present. They share the common view that hired farm labour is both uneconomic (at 25s or more for an eight-hour day) and inefficient. The land worked by the partnership is dry (bagħli) apart from two irrigable (saqwi) tmien. In 1957 it was utilised as follows:

[311]

Fruit and vines	21 tmien
Cereals and fodders	18 tmien
Fallow, unproductive, or sub-let	13 tmien
Potatoes	6 tmien
Other vegetables	5 tmien

*159 Apples are the biggest single cash crop and the overall
245 success of any year depends on them. They were introduced
242 to the district by Ġamri's father some years ago and now grow in large numbers in a sheltered valley along with lemons, oranges, mulberries, figs, cherry-plums and other fruits. The produce is good but is usually affected by some pest or disease. The most prevalent of these is a boring grub. Ġamri and his brother spend a large part of September and October simply gouging this pest from the trunks of affected trees - with penknife and piece of wire. They regard this time-consuming and unremunerative task fatalistically. But of late Ġamri has been wondering whether the same result might not be achieved in a fraction of the time by the application of some spray. He knows nothing of the details of this and is more than a little doubtful of possibilities.

*159 Since 1953 Ġamri and his brother have expanded their
245 area under vines, buying seedlings from the Government Farm
[435] at 1d each. They consider vines the most profitable of crops, especially grapes for wine since these can be picked

159 245 in a single picking and do not require the same attention to quality as those for the table.

159 245 231 451 In this move towards more vine production and the recent interest in pigs Ġamri is making a conscious effort to emphasise the profitable in place of the unprofitable. Income for Ġamri means the receipts on produce sold. Unlike most farmers he keeps a record of this income in order to see "how business is progressing" and in order to enable him and his brother to effect a share-out of profits. As found generally Ġamri takes no account of his own labour, or that of his brother or nephews, in his costing. Moreover the position is complicated by the fact that no clear distinction is made between money spent on the home and family, and money spent on field rents, costs of seed, manure, etc. It is all held "in one purse". Ġamri himself maintains that a more usual [593] practice is for the farmer to give his wife a fixed amount for house-keeping but, in his own case, there is clearly a high degree of trust and co-operation between husband and wife.

159 434 454 [511] At Easter, 1958, Ġamri spoke of a balance of some £400, less than half his reserves of a year previously. The drop was due to a £200 outlay on pigs and pig-sties together with several smaller items (such as £50 for street surfacing, £30 for a sewing machine, £15 hospital expenses, £30 for annual field rents, etc.) and the cost of repairing the damage wrought by the exceptionally heavy storms of late 1957. During the year 1956-57 it is estimated that Ġamri's income was about £350. £250 of this came from the sale of field produce as shown below, the rest is an estimate of income from pig sales and other items.

159 434

Income:	From partnership land.	From Ġamri's Land	TOTAL
Fruit.....	£340	-	£340
Grapes.....	49	£ 8	57
Sulla.....	13	15	28
Potatoes.....	12	-	12
Melons.....	11	-	11
Tomatoes.....	7	13	20
Totals.....	£432	£36	£468
Ġamri's share	£216	£36	£252

159 434 435 This income pattern is by no means standard from year to year. The 1956-57 season was a poor year, with potato prices to the farmer low, sulla yields below average and a glut of fruit. 1953, on the other hand, was the best of recent years and brought each of the two brothers an income of £310 on fruit alone. The 1956-57 season with its glut in fruit found a quantity greater than in 1953 bringing less return than in that year on the market. This uncertainty as to income between one year and the next is today more important to the arable farmer than to the herdsmen who can rely on the M.M.U.'s guaranteed price and can therefore estimate his income more [454] accurately. The arable, and, especially, the fruit-farmer

In the first two cases the seasonal distribution of activity reflects the major points of contrast between the 'dry' and 'irrigated' operator. The herdsman stands in contrast to both of these with the care of his animals occupying a large part of every day of the year - even including Sundays and festa days when the field-working farmer expects to be off duty.

Ġanri and farming

Ġanri is a highly intelligent man in his forties who by his own efforts has progressed well beyond the limits of his very elementary formal education. He reads the Maltese-language daily 'Il-Berqa' (B/55) and keeps abreast of the school work of his children whom he encourages to learn English thoroughly as "the land cannot be divided among them all". English language is synonomous with education in his thinking, and education, in turn, he sees as the means of escape from the lowly position of the farmer in Maltese society. "We are but an Arab breed", he observes somewhat ashamedly. He himself has "little faith in the Government - which should help us". Much of this attitude had its roots in the War years of 1939-45 when the siege and food shortages produced something of a Golden Age for the food-producer. The farmer has not forgotten the £10 offered by the Government for 1 cwt of potatoes. Since the return to peace-time conditions the economic position of the farmer has certainly deteriorated rapidly with the depletion in his reserves, built up during hostilities, and the rise in labour costs and in the cost of living. During the War "the farmer was not so hungry as the townsman who had to rely on the black market"; now his position is one of a constant battle with rising costs. Ġanri, as an arable farmer, lacks the steady and guaranteed income of the milk-producing herdsman. His recent moves towards pig-meat production represent an attempt to get into an apparently more profitable line.

His nephew and many other farmers, though not Ġanri himself, make the mistake of failing to distinguish between the Church and the Government in their attitude to "the authorities". Thus the nephew regards the Catholic Action movement (of which he is an active member) as somehow "helping to run the country". But even Ġanri himself thinks that the Social Action Movement (another part of the Church's Lay Apostolate) must have some part in the secular administration of the country for he believes that an application for relief for storm damage made, through the Parish Priest, to that Movement amounts to an approach to the 'Gvern' (Government) of which he is so full of criticism. The case illustrates a point made elsewhere that the Maltese farmer is still primarily village-conscious. Clearly this is not to deny, however, that his horizon today is much wider than was the case when his father regarded

159 Valletta as a mysterious other-world to be entered cautiously
829 and very occasionally by the humble and bare-foot farmer.
181 Ġamri is typical of the section of the farming community
178 in Malta and Gozo which has absorbed an education beyond anything in previous generations but whose age prevents them taking the lead into any kind of Maltese farming reconciled with current social, economic and technical changes. He is "too old now to move from farming", but he is encouraging his children to acquire the education which will help them to escape from the land altogether.

CASE X : Summary.

159 (An arable farmer (Ġ) in partnership with his brother and
423 engaged in diversified production.)
427 (Details refer to Ġ alone unless otherwise indicated.)

A. Land.

- Ġ has an interest in 17 plots totalling 62.5 tmien; of this, 53 tmien is rented by the partnership.
- One large plot of 21.5 tmien, the remainder ranging from 1.0 to 8.0 tmien.
- All within an area of c.1 sq. mile in the Binġemma Basin and in Onejna, on a variety of soils, mainly Terra Rossa and Carbonate Raw Soils.
- 41.0 tmien owned by private landlords, 9.6 by the Church, 6 tmien by the Government, and 3.2 by Ġ's father.
- Rent approx. £30 p.a. varying from 8/- to 14/- per tomna.

159 B. Utilisation.
241

- The full range of crops grown in a complete year (1957-8) is shown in Table 6 (WORK ANALYSIS).
- In summary:

Fruit and vines	20.9	tmien
Cereals and fodders	17.9	"
Potatoes	6.2	"
Other vegetables	4.9	"
Fallow or unproductive or let 'bin-nofs'.	12.6	"
	62.5	tmien

159 C. Livestock.
231

- Relatively unimportant in early 1957, but a herd of pigs is being built up and in 1958 numbered five sows and their litters.
- One mule.
- 2 goats, 2 sheep; milk is purchased as these do not supply family's needs.
- 2 dozen hens, rabbits.

159 D. Capital.
423

(i) - No freehold land apart from one small patch of roadside waste.

454 (ii) - Recent investment in the construction of pig-sties.

(iii) - Cash reserve of £400 in April 1958 represents a reduction of 50% on reserve held a year previously; £200 spent on building up pig herd and accommodation for same; remainder covered deficit on year's farming and special expenses e.g. road surfacing, hospital expenses etc. Ġ expects to build up his cash reserve again in ensuing years.

159 (iv) - Equipment:
409 - Usual hand tools, cart, etc.
427 - Ġ owns no mechanical equipment but his brother's rotary cultivator is used on the joint holding, Ġ

CASE XI : Summary.

(An arable farmer mainly concerned with irrigated produce.)

*159 423 427 A. Land.

(i) 14 tmien irrigated land in single block of five fields in Mallieha District. 2 tmien freehold.

(ii) c.8 tmien dry land in single block of 3 fields in Qawra District.

(iii) 45 tmien in single block (of which 37 wasteland) in Bajda Ridge area.

(iv) c.6 tmien in 21 scattered field plots in Marfa.

These lands lie on the periphery of a triangle with sides measuring 4½ miles X 2 X 2 miles. Leased land is held in a variety of ways e.g. some is held on an annual lease at a rate of 15/- a tomna, other is held in emphyteusis from the Government. Of the latter, a composition fee of £200 replaced an annual rental for the last 45 years of a 99 year lease for 45 tmien. For the rest a peppercorn rent of c.2/- a tmien per annum.

*159 241 B. Utilisation. With parcels of land so dispersed and so variable in quality great variations in land use may be observed.

(i) The irrigated land carries potatoes, tomatoes, artichokes, a variety of pumpkins and marrows and many other types of vegetables. Tree crops are raised on the plot boundaries. Crop list: Potatoes, Tomatoes, Artichokes, Cucumbers, Marrows, Pumpkins and Water Melons. Sulla, Black and White Vetches, Turnips, Vines, Celery, Endivon, Onions, Maize, Kohl Rabi, Carrots, Garlic, Figs, Pomegranates, Apricots and Peaches.

(ii) The unirrigated land ranges from patch cultivation of cereals, beans and peaches on Bajda Ridge to vines, cereals and vetches in the other districts. These parcels get only c.60 man-days work each year. This land although neglected is held, partly because of the low-rent emphyteutical leases, partly to supply small amounts of fodder and forages for the few livestock.

*159 ●231 C. Livestock. During 1957/1958 2 heifer calves. Cattle are only kept for rearing between ages of c.3 and c.18 months, and for supplying dung. 4 goats (2 ewes and 2 kids) and 3 sheep kept for supplying domestic milk and cheese needs. No work animals ('bejjem tax-xoghol').

*159 [423] [435] [454] [406] D. Capital.

- 2 tmien freehold irrigated land valued at £200 and freehold house in the village.
- No liquid reserves other than petty cash, according to statement made to C.A.R.E. Estimated possible total less than £100.
- Equipment. No machinery other than local tools and a fixed diesel water-pump. Not averse to mechanization but suspicious of credit terms.

E. Labour.

[464] - Family labour of one adult son and occasional work from wife and from four other children. Mutual aid arrangement with brother-in-law.

[474] [241] [464] - A member of a C.A.R.E. implement co-operative (Section 2) which entitles him to favourable terms for tractor-plowing: shallow-plowing at 10s per tomna and deep-plowing at 20s per tomna. This represents a saving of 5s per tomna in return for a deposit to the Co-operative of £2.

- Rarely hires labour.

[461] - An analysis of the daily work schedule based on an original record kept by the farmer's daughter:

*159 433 435 February when prices start at c.9d a head rather than later in the year when they drop to c.4d a head.

(iv) A variety of other vegetable produce fruit and grapes are sold in small quantities.

(v) Stated cash income - £200 per annum. Regular income comes from arable products. Every two or three years sales of young heifers in calf bring in sizeable sums e.g. in 1958 one such Friesian heifer was sold for £170 and a 3 month old calf bought for £61.10.0.

G. Husbandry.

*159 241 (i) Land:

(a) Main concentration on maintaining high yields of vegetable crops on irrigated land, usually by heavy manuring rather than rotational farming. In 1956 - used all dung from own livestock.
- Purchased £100 worth of dung from an urban milk producer.
- Applied 25 bags Sulphate of ammonia @ 25/- to 27/6d a bag.
- Collected several cartloads of mixed refuse from Government centre.

Dung applied directly to cucurbits, but mixed with refuse and sulphate of ammonia otherwise.

(b) On non-irrigated land crop sequence usually cereal, leguminous fodder, potatoes, except on poorest land where vetches alternate with barley.

[461] (c) Irrigation takes much of labour-time and water is applied empirically. A typical early potato crop will be watered 13 times, each watering by channel-end-bed control taking 1½ days.

[242] (d) Chemical treatment of the crops is accepted but not understood. Since 1953 Chloride of Lime and Copper Sulphate sprays have been used but the farmer is not at all sure of why they should help - the sprays are applied "when the potatoes show a blackness". This exemplifies a general attitude that certain pests and diseases can be treated with one or another of the "medicines" but considerable mystery surrounds the methods of application and the processes concerned.

(ii) Seeds:
Relies entirely on own plant strains except for potatoes. Is prepared periodically to buy Arran Banner seed-potatoes and in 1958 plucked up enough courage to try a new strain - Sigenheimer.

*159 ●23 (iii) Livestock:
Only interested in rearing heifers which are fed traditionally on a little grain, green fodder including "hoxix", sulla, hay and beans.

H. General.

*159 24 433 435 [465] (i) An example of better kind of intensive market gardener. It is unlikely that without a complete re-organisation of his farming life any more irrigated land could be worked. At present casual labour costs of 15/- to 25/- a day, expansion of the labour force would be impossible. The only relatively simple economic improvement that could be made is the raising of quality standards and to a limited extent yields. In Malta there is no effective price differential between products of different quality, and the local market is very quickly saturated. This cultivator and others like him vaguely realise the predicament and pin their faith on minimum price guarantees, which in fact have little to do with the case.

*159 451 (ii) The farmers children keep rough accounts but only of the main items of disbursements and income. This is one of the few farmers who occasionally put a monetary value on his own labour. That of the family was taken for granted.

*159 As village-weighman he has a high social standing in the
829 district. His literacy, spacious house, and herd of cows
178 further enhance his status. He maintains that within the
[554] village the place of the Parish priest is as ever it was
[793] "in spite of the new learning". He notes that the increas-
[626] ing number of dissenting voices in the village are kept
firmly in their place by the pressure of public opinion but
that political rivalry, a comparatively recent feature in
[197] the village, is growing. The returning emigrant brings new
ideas - including some on religion - but the strength of
the Church remains much less questioned than is the case in
[799] the towns. Census shares the still general view that money
given to the Church is "payment towards the good of the
[651] community". Money paid to the Government in the form of
taxes would, on the other hand, be regarded as an imposition
bringing no benefit to the individual, and therefore to be
avoided.

CASE XII : Summary.

*159 (A cows' milk producer and village weighman.)

423 A. Land.
427 33 Tmien in Mqabba-Kirkop Plain:
4 Field plots in 3 parcels, on Terra Rossa Soils and Xero-Rendzinas.
All leased from 2 landlords: Total rent £34 per annum.

*159 B. Utilisation.
241 Over 5 Tmien wasteland.
Main concentration on fodder, which accounted for 74% crop area in 1957/58, as against only 33% in 1956/57 winter season.
2 tmien under barley - pulled green.
3 tmien under sulla.
6½ tmien under vetches.
5 tmien under wheat.
c.10 tmien under potatoes.
Remainder under vegetables, prickly pear and fallow.
Main cash crops potatoes and onions.

*159 C. Livestock.
● 231 Late 1957 - 13 head of cattle (10 milch cows, 2 calves, 1 service bull). All Maltese Friesian. 10 goats;
234 1 ewe; 2 horses; 50 poultry; rabbits.
This herd was built up from 6 goats, 4 sheep and 1 cow in 1938.

*159 D. Capital.
[423] - No freehold land. Owns large village house.
[454] - No statement as to capital reserves but general evidence suggests a sum of the order of £1500.
[407] - Equipment - no machinery, but normal range of local tools.

E. Labour.
*159 - Family labour - one 30 year old son.
464 - In 1956 male hired labour amounted to 60 days, and female to 90 days.
[465] Cost - men c.£1 a day, women c.14/- a day.
Hand labour almost entirely for sowing during autumn and winter and harvesting in early summer.
[427] - Hires heavy tractor plow, rotary cultivator and
[241] threshing machine each year. Costs of contract
[407] plowing 15/- to £1 a tmien.

241 first stage in the move from the land and one expects it to
178 be succeeded, possibly in the following generation, by a com-
461 plete break with the land or the maintenance of a purely residual and casual interest, as in (d) above. In this
*[159] case, Toni continues to produce cash crops for sale but his sons when they return are not likely to do so. Thus this type of small scale part-time farming will have little or no importance in agriculture as a producing industry.

*159 Toni himself substantiates this view. "Farming has no
241 future in Malta since there is no money in it for the younger
178 generations, and so you can't expect people to go on working
829 fields if they can avoid it". He sees the farming population as a depressed class and attributes this in large part to the fact that "The farmers count for only 12,000 votes at election times". Unions are, for Toni, "no use for the farmer and his problems" because, it appears, of suspicion and ignorance. He further observes that "the Maltese farmer grumbles easily - because of the same factors. This is itself discouraging the younger farming generation from staying on the land and struggling against rising costs to sell products which are but feeble competitors against the imported article.

He remains dubious of the effects of even the present Government policy of assistance by both financial support in various forms and attempts to introduce more efficient methods and better adapted and therefore more profitable crops, etc.

CASE XIII : Summary.

*159 (A part-time arable farmer and caretaker of a military camp.)
423 A. Land.

- 2 plots of irrigated land at il-Ghadira and il-Hofra both in the Mellieha Isthmus area.
- Several plots of dry land, usually held idle for relatives who are expected to return from Canada.
- [427] Soils: i-Iklin complex.
- Rented from Civil Government and War Department.

*159 B. Utilisation.

- [241] Irrigated plots carry potatoes, tomatoes and vines with a great variety of vegetables.
- Dry land: potatoes, tomatoes, beans, sulla, onions, herbs for home consumption.

[231] C. Livestock. 60 or 70 rabbits, 1 sheep.

*159 D. Capital.

454 - No freehold land, but owns a house in the village.
- Usual hand tools.
422 - Spray and rotary cultivator recently acquired.
423 - Financial position not disclosed but appears to have considerable reserves.
- Owns a car.
- Son owns motor lorry sometimes used on holding.

*159 E. Labour.

464 - Some help from wife and daughter but remainder of family have either emigrated or entered non-agricultural employment in Malta.
[465] - Formerly hired a labourer at £5 per week but he left for the Dockyard in 1955. In 1958 it was difficult

APPENDIX I D : Agriculture (E/164-1957)

131 (i) AREAS

AREA of the Maltese Islands..... 278,429 tmien (77,400 ac)
Area of Malta..... 217,143 tmien (60,800 ac)
Area of Gozo..... 59,286 tmien (16,600 ac)

423 CULTIVABLE AREA of the Maltese Islands 156,211 tmien (12,484 hldngs)
Holdings of dry (baghli) land.... 116,460 tmien (10,517 ")
Holdings of irrigable (saqwi)land 700 tmien (88 holdings)
Holdings of both dry & irrigable. 39,051 tmien (1,879 ")

241 (ii) ACREAGE and PRODUCTION of CROPS. 1956-57
433
435

CROP	ACREAGE	VALUE(£)	YIELD(Tons)	YIELD per Acre (tons)
Wheat	5,192	98,908	2,916	0.6
Barley & Meslin	4,836	68,339	2,738	0.6
Vetches	1,727	51,993	1,354	0.8
Forages	11,000	361,150(a)	32,000(a)	2.3
Broad Beans	1,000	15,233	356	3.5
Cumin Seed	14	180	3	0.2
Cotton	35	800	8	0.2
Locust Beans	500	20,000	1,500	3.0
Total	24,304	616,603	40,875	
Potatoes (spring)	6,000	350,000	21,000	3.5
Potatoes (autumn)	3,057	193,394	9,157	3.0
Melons	2,721	32,908	1,714	0.6
Onions	789	47,970	3,000	3.8
Tomatoes	3,000	146,000	12,000	4.0
Other vegetables	3,697	344,744	18,436	5.0
Total	19,259	1,115,016	65,307	
Grapes	5,204	171,102	5,347	1.0
Citrus	160	32,000	510	3.0
Other Fruit	1,000	105,000	4,000	2.0
Total	6,364	308,102	9,847	
Flowers & Seeds	250	100,000	..	
TOTAL	ac.50,177	£2,139,721	116,029 Tons	

(a) Including Straw.

231 (iii) CLASSIFICATION OF LIVESTOCK. 1957 (September)

	Malta 1957)	Gozo (1957)	TOTAL(1957)	TOTAL(1948)
Horses	1,688	369	2,057	2,753
Donkeys	1,732	1,107	2,839	3,335
Mules	1,535	349	1,884	2,361
Goats	21,430	10,428	32,058	
Billy Goats	417	177	594	80,877
Kids under 1 year...	3,584	3,121	6,685	
Sheep	8,091	4,241	12,332	
Rams	98	43	141	21,237
Lambs under 1 year..	1,015	1,330	2,345	
Bulls	377	294	671	
Heifers Pregnant....	339	195	534	
Heifers other.....	731	383	1,091	
Milch Cows	2,536	953	3,492	3,833
Stud Bulls	111	26	137	
Maltese Draught-Cows	109	6	115	
Imported Store Bulls	2,860	824	3,684	
Breeding Sows	2,793	588	3,381	
Boars	214	87	301	20,915
Sucking Pigs	935	367	1,302	
Other Fatteners	6,581	1,833	8,314	
Hens	198,883	129,630	332,513	
Other Poultry	5,148	1,384	6,532	
Rabbits	43,848	16,048	59,893	